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Complete Spec fication Left, 16th June, 1896—Accepted, 18th July, 1896

PROVISIONAL SPECIFICATION.

Improvements in Artificial Teeth.

I, CARL OTTO JÜTERBOCK, of 46 Lennard Road, Penge, in the County of Surrey, Goldsmith, do hereby declare the nature of this invention (a communication to me from Paul Sorge, of Junkerstrasse, Fürstenwalde, in the Empire of Germany, Dentist) to be as follows :—

The invention relates to that class of artificial teeth in which crowns are provided with pins or pivots and are connected to natural roots by means of cement.

Hitherto these pins or pivots have been made solid and have been of comparatively small cross section.

According to this invention the pin or pivot is made hollow and is attached to a plate of metal, which forms a stop or base plate and rests against the exterior portion of the root of the tooth. The tooth is attached to the base plate in any well known manner.

In some cases I attach an L shaped piece of metal to the hollow pin, in which case one arm forms the base plate and the tooth or crown is attached to the other arm.

These hollow pins or pivots are formed with holes at each end, and a hole is also formed through the base plate. A number of other holes are drilled through the walls of the pin and some notches are also cut therein.

The root of the tooth is drilled out and filled with plastic cement. The pin or pivot, to which is attached the artificial tooth or crown, is then pressed softly into position, the cement passing through the holes to the interior and the excess escaping through the hole in the base plate. The pin or pivot, being much larger than hitherto, forces the cement well against the interior of the root, but at the same time it avoids excessive pressure therein as the superfluous cement can readily escape.

It will be well understood that the cement passing through the holes and filling the interior of the pin will attach this latter to the walls of the root more firmly than the solid pins hitherto in use.

Another advantage to be derived from the use of this invention is that when an abscess forms at the root of a tooth fitted with an artificial crown, a hole may be drilled through the cement to the point of the root and a suitable remedy may thus be applied without removing the crown.

The above description relates to artificial incisors and cuspids but it is evident that similar hollow pins may be applied to bicuspids and molars. In this case a hole or holes would be drilled through the crown to allow the superfluous cement to escape.

Dated this 19th day of September 1895.

HARRIS & MILLS,
23 Southampton Buildings, London, W.C., Agents.

[*Price 8d.*]

COMPLETE SPECIFICATION.

Improvements in Artificial Teeth.

I, CARL OTTO JÜTERBOCK of 46 Lennard Road Penge, in the County of Surrey, Goldsmith, do hereby declare the nature of this invention, a communication to me from Paul Sorge, of Jankerstrasse, Fürstenwalde, in the Empire of Germany, Dentist, and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement :—

The invention relates to that class of artificial teeth in which crowns are provided with pins or pivots and are connected to natural roots by means of cement.

Hitherto these pins or pivots have been made solid and have been of comparatively small cross section.

According to this invention the pins or pivots are made hollow and with holes at each end, a number of other holes are drilled through the walls of the pin and some notches are also cut therein.

The invention is illustrated in the accompanying drawings in which

Fig. 1 is a side or edge view and Fig. 2 is a rear or inner side view of an artificial incisor tooth or crown attached according to the present invention to a natural root which latter in such views is shown in section.

Fig. 3 is a vertical elevation, Fig. 4 is a vertical section and Fig. 5 is a plan of the pin or pivot connected with a centrally perforated stop or base plate and a vertical plate for attachment to the artificial tooth or crown and

Fig. 6 is an elevation and Fig. 7 is a vertical section of an artificial molar tooth or crown attached by means of the improved pins or pivots to two natural roots which latter are shown in section in both of said views.

In the various views like parts are indicated by similar letters of reference.

a is the improved pin or pivot which according to the present invention is made hollow and somewhat tapered, it is also formed with a hole a^1 at each end and a number of holes a^2 are drilled through its walls and some notches a^3 are also cut therein.

In some cases, that is, when applying the invention to incisors, cuspids, and some bicuspids I attach an L shaped piece *b*. b^1 of metal to the hollow pin or pivot *a* as shown at Figures 1 to 5 in which case one arm *b* forms a base plate which is centrally perforated and rests against the exterior portion of the root *c* of the tooth and the artificial tooth or crown *d* is attached in any well known manner to the other arm b^1.

When fixing an artificial tooth or crown *d* of the above character to the root *c* of a tooth, the said root is drilled out and filled with plastic cement. The pin or pivot *a* to which the artificial tooth or crown *d* is attached, is then pressed softly into position, the cement passing through the holes to the interior of the pin or pivot *a* and the excess escaping through the hole in the base plate *b*. The pin or pivot, being much larger than hitherto, forces the cement well against the interior walls of the root *c*, but at the same time it avoids excessive pressure therein as the superfluous cement can readily escape.

It will be readily understood that the cement passing through the holes and filling the interior of the pin or pivot *a* will attach this latter to the walls of the root *c* more firmly than the solid pins hitherto in use.

Another advantage to be derived from the use of this invention is that when an abscess forms at the root of a tooth fitted with an artificial crown, a hole may be drilled through the cement to the point of the root and a suitable remedy may then be applied without removing the crown.

At Figures 6 and 7 I have shown the improved pins or pivots *a* attached to an artificial crown *d* of a molar tooth by placing the said pins or pivots in position

within the plastic material forming the tooth crown, a hole d^1 being made at the same time in the tooth crown opposite each pin or pivot and communicating with the interior of the latter after which by the usual firing process the pins or pivots become securely fixed in the said crown.

In this case the base plate *b* is dispensed with. The artificial tooth or crown shown at Figures 6 and 7 is secured to the roots *c. c* by means of the pins or pivots *a. a* and cement as hereinbefore described and the surplus cement will escape through the holes d^1 in the tooth crown.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed I declare that what I claim is :—

1. The improvements in artificial teeth substantially as herein set forth.
2. In artificial teeth the use of a hollow pin or pivot having perforated walls and a hole at each end to connect the artificial crown or tooth with the natural root substantially as herein set forth.
3. In artificial teeth the use of a hollow pin or pivot having perforated walls and a hole at each end in combination with an L shaped plate one arm of which is attached to the artificial crown or tooth whilst the other which is centrally perforated, is fixed to the hollow pin or pivot substantially as herein set forth and for the purpose stated.
4. In artificial teeth the fixing of hollow pins or pivots of the character herein described within the material forming the body of the artificial tooth or crown and forming holes in the latter communicating with the interior of said hollow pins or pivots substantially as herein set forth.

Dated June 16th 1896.

HARRIS & MILLS,
23 Southampton Buildings, London, W.C., Agents.

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Fig. 1.

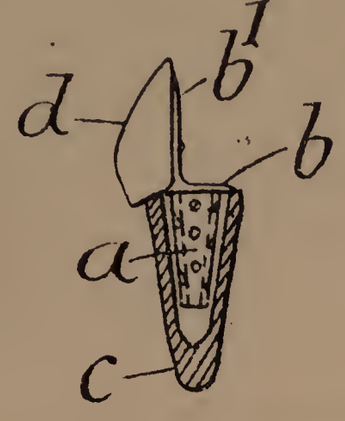


Fig. 2.

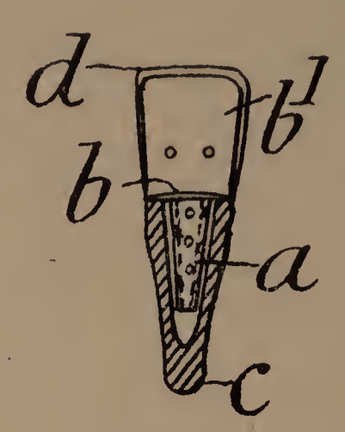


Fig. 3.

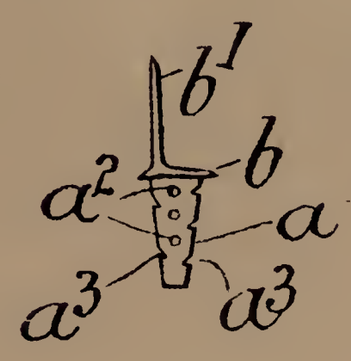


Fig. 4.

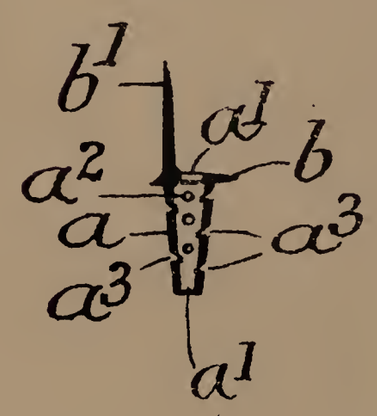


Fig. 5.

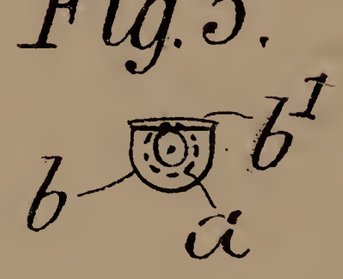
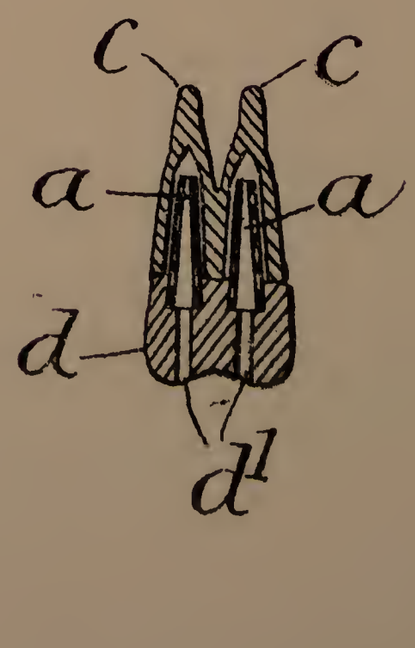


Fig. 6.

Fig. 7.



[This Drawing is a reproduction of the Original on a reduced scale.]

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